That which is claimed is:

1. A method of forming an insulator in a silicon carbide electronic device, comprising:

fabricating a nitrided oxide layer on a layer of silicon carbide; and

annealing the nitrided oxide layer in an environment containing hydrogen.

2. The method according to Claim 1, wherein the silicon carbide layer comprises 4H polytype silicon carbide.

3. The method according to Claim 1, wherein the silicon carbide layer comprises a silicon carbide layer on a non-silicon carbide substrate.

4. The method according to Claim 1, wherein the silicon carbide layer comprises a portion of a silicon carbide substrate.

5. The method of Claim 1, wherein the step of fabricating a nitrided oxide layer comprises at least one of forming the oxide layer in at least one of nitric oxide and nitrous oxide and annealing an existing oxide layer in at least one of nitric oxide and nitrous oxide.

6. The method of Claim 1, wherein the step of fabricating a nitrided oxide layer comprises the steps of:

fabricating an oxide layer; and

fabricating a nitride layer on the oxide layer so as to nitridate the oxide layer on which the nitride layer is fabricated.

7. The method of Claim 6, wherein the step of annealing the oxide layer in an environment containing hydrogen is provided substantially concurrently with the step of fabricating the nitride layer so that the step of fabricating a nitride layer on the oxide layer comprises fabricating a nitride layer on the oxide layer so as to nitridate and hydrogenate the oxide layer on which the nitride layer is fabricated.

8. The method of Claim 1, wherein the step of annealing the oxide layer comprises heating the oxide layer to a temperature of greater than about 400 °C in a hydrogen containing environment as part of another processing step.

9. The method of Claim 1, wherein the step of annealing the oxide layer comprises annealing the oxide layer at a temperature of greater than about 400 °C in a hydrogen containing environment.

10. The method of Claim 1, wherein the step of annealing the oxide layer comprises annealing the oxide layer at a temperature of less than about 900 °C in a hydrogen containing environment.

11. The method of Claim 1, wherein the step of annealing the oxide layer comprises annealing the oxide layer at a temperature of between about 400 °C and about 1000 °C in a hydrogen containing environment.

12. The method of Claim 1, wherein the step of annealing the oxide layer comprises annealing the oxide layer at a temperature of between about 400 °C and about 800 °C in a hydrogen containing environment.

13. The method of Claim 1, further comprising the step of performing subsequent high temperature processing steps in a hydrogen containing environment.

14. The method of Claim 1, wherein the step of annealing is preceded by the step of forming metallization for a semiconductor device associated with the oxide layer.

15. The method of Claim 14, wherein the step of annealing the oxide layer comprises annealing the oxide layer at a temperature of less than about 900 °C in a hydrogen containing environment.

16. The method of Claim 15, wherein the step of annealing the oxide layer comprises a contact anneal.

17. The method of Claim 1, wherein the step of annealing comprises annealing the oxide layer in forming gas having about 4% hydrogen and 96% inert gases.

18. The method of Claim 1 further comprising forming a silicon carbide metal oxide semiconductor device having the oxide layer as a gate oxide of the metal oxide semiconductor device.

19. The method of Claim 1, wherein the step of annealing the oxide layer is carried out for at least about 2 minutes.

20. A method of fabricating an oxide layer on a silicon carbide layer, comprising:

nitriding the oxide layer on the silicon carbide layer with at least one of nitric oxide and nitrous oxide; and

annealing the nitrided oxide layer at a temperature of between about 400 °C about 900 °C in a hydrogen containing environment for at least about 2 minutes.